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Determinant of design elements and compositional settings of window display on the corporate strategic merchandising of large scale department store: a case of central world department store

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Abstract

Utilizing window display arrangements in the Central World Department Store in Bangkok as a case study, the research aims to elucidate the differentiation of design settings in attracting and conveying of merchandizing message to its target group. The research hypothesizes that the manipulation of window display design elements is able to convey the product positioning, value, and quality correctly. A set of 3D photographic stimulus with different design element is created to test with a group of 200 subjects for perceptual response and decision to purchase. Findings of the experiment are utilized to model the window display design principle.

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Keywords: window display, design element, visual stimuli.

1. Introduction

Window display resembles product wrapping used in a store, which is regarded as an important medium of communication to customers. It works in line with a promotional campaign launched according to corporate strategic planning and functions as a direct communicator of what a product represents in a store. In addition, window display performs a subtle role of a stimulator drawing the eyes of display viewers or passers-by. Such attraction is likely to create their desire to visit a store. Window display designed in accordance with corporate strategies involves two various disciplines where science meets art. Design science follows principles of compositional setting that embraces unity, harmony, repetition, balance, rhythm, contrast and so on. The elements of art and design, such as color, lighting, material, props, size, textual style, mannequins, etc., are to be well-composed and blended in effective window display design. The perception and comprehension of each individual yet vary according to their diverse background. Therefore, window display design communicates corporate unique

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identity and its selling strategies require an insightful study on personal background and factors of a target group for enabling aright responses to perception. Sound research on personal preferences of a target group determine how window display be organized in respect of target group's needs.

The objectives of this study were as follows: firstly, to study the effect of the organization and manipulation of window display design elements having towards a target group's perception in terms of corporate identity and selling strategies; secondly, to determine the extent of comprehension of a target group with different attributes in terms of perceptual cognitive and affective processes; thirdly, to develop a model of a window display design utilizing compositional setting principles and design elements for effectively conveying corporate strategic identity and responding to the cognitive and affective processes of a target group.

2. Theoretical Background and Research Framework

Window display design is to organize merchandizing based on selling strategies and design elements integrated with compositional setting or principles of design (Bell and Ternus, 2003). The design that aims to draw and attract display viewers' attention involves various factors as shown in table one (Pegler, 1983; Diamond and Diamond, 2007; Morgan, 2008). First and foremost, the use of color is the first factor that attracts a great deal of viewers' attention. A product itself could also draw eyes of passers-by through the use of distinct background color that makes the product more prominent. There are two tones of color: warm and cool, which are used widely in decorating a shopping mall window display that contributes diverse impact. Secondly, lighting is relatively a vital factor as its level appropriately applied often affects viewers' eyes. As an experiment done by Babin et al. (2003), they figured out that colors and lighting had an effect on consumer's reaction providing they were used in separation and/or combination. Moreover, lighting is a key part in creating a retail environment to be attractive, interesting, and comfortable. Such pleasant surroundings influence how customers feel and help retaining their loyalty to a store. According to the studies of Summers and Hebert (2001) and Turner (1994), they found that the direction and intensity of lighting used in window display resulted in various perceptual moods of customers and even could affect their perception either favorably or unfavorably towards the products displayed. Lighting (accent or diffused), illumination, and intensity affect perception of each individual customer. Thirdly, materials in window display reinforce viewers' interests and produce eye-catching appeal. Besides, composition, such as lines, shapes, color, emphasis, mixed composition, creates a character, which is indispensable for window display. Another supportive factor accentuating the distinctiveness of a product is props as they could be well-blended with the product to create a story. Graphic design both images and texts play a crucial role in window display as well. Regarding to what Ti (2009) discovered from his research, the findings illustrated that "the context setting of a window display had significant effect on consumer's mental imagery and arousal response." Therefore, the use of textual style (signage and graphic) does not only convey messages but also create interesting context. Provided that all windows are stages, the one factor that needs to be taken into account is players to unveil products: mannequins. One aspect concerned the use of mannequins that Fister (2009) posited was that full size mannequins seemed to have stronger aesthetic responses than without them. What's more, how a product is organized in window display makes it come alive; therefore, showcasing just a single product line or a complete product assortment also impacts on attractiveness to viewers. There are still a number of factors taken into consideration pursuant to grounded theory, for instance, the use of presenters, in-store visibility and much more.

Personal factors of customers often vary accordingly such as gender, age, educational background, and tastes. These factors affect their perception in terms of affective and cognitive processes. In general, affective refers to feeling responses, whereas cognitive consists of mental responses (Blechman, 1990). These mechanisms were also effectively used in the study conducted by Chebat and Morrin (2007) and Babin et al. (2003) to investigate consumers' attitudes. With the abovementioned theories, this research's endeavor into the aspects of window display and its factors affecting consumer perception could draw clearer overall pictures of consumer minds.

Referring to the study on perception, S-O-R (stimulus-organism-response) Paradigm determined how people perceive, think, feel and respond to certain stimuli. According to Mehrabian and Russell (1974), environmental psychology focused on the interplay between physical stimuli on human emotion and physical stimuli on a variety of behaviors. This interdisciplinary field was used in some studies concerning retail context (Thang and Tan, 2003;

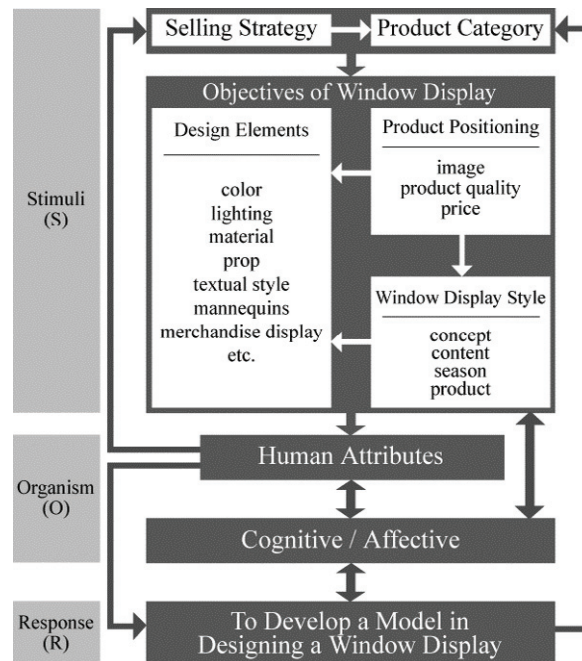


Figure 1. Conceptual Framework


3. Research Methodology

The subjects of this study were graduate students studying at King Mongkut's Institute of Technology Ladkrabang, totaling 200 people. The sampling method used was simple random sampling. Controlled variables used in this study to test the instrument were grouped into three: gender and age, art skills, and income and taste. The instruments were questionnaires and visual stimuli images derived from literature reviews determining perception of target groups and using composite measure to gauge preferences and comprehension of the subjects based on affective and cognitive processes. There were altogether 11 aspects from S-O-R theory, visual perception, design elements and compositional setting of window display design. 3D photographic images were developed to show the images of window display as well as a number of indicators. By pairing indicators of each aspect, comprising 24 pairs (48 images), the respondents would be asked to express their opinions towards the shown images and rate them accordingly in 5-level Likert questionnaire items (Likert, 1932). Semantic differential scale was used to measure the connotative meaning of objects, events, and concepts (Snider and Osgood, 1969) that respondents had towards the given objects. The obtained data would be analyzed accordingly.

The first step was to analyze and make a conclusion of each aspect, for example, background color, lighting, composition, in-store visibility, material types, the use of props, textual style, the use of mannequins, product assortment, presenters, and window size. The following step was to develop a window display model to examine respondents' perception towards aspects inquired in questionnaires. There were altogether 11 aspects: complexity, interests, attractiveness, distinctiveness, tastes, price range, product quality, desire to visit and purchase. This study

focused on the 2 majors subjective factors: affective and cognitive processing of visual stimuli in customers' minds. For affective, such as intrinsic liking or disliking, there are four factors operationalized into questions concerning complexity, interests, arousal, and attractiveness. The five Cognitive factors used for implicit measurements of the respondents' preferences are product differentiation, product taste, price range, product value, and product worthiness, product differentiation and product taste factors reflecting the product positioning. The same method was undertaken with the price range, product value and worthiness. As the value of products could be derived from price range and value of the products while its quality could be from product worthiness perceived. So, the factors defined in affective and cognitive processes could finally lead to a purchasing desire and browsing decision as depicted in Table 1.

The window display model would control other untested factors to be in the same and different context, of which aspect was aimed to study, one at a time. Two images of window display model: one with aspects to be studied and another without any aspects were shown to respondents (Table 1). The study on perception in questionnaires used semantic differential scale to compare between two images (left and right). In the questionnaires, the format of a typical five-Likert item was used: five represented the highest scores of both left and right pictures. The respondents specified their level of opinions to given aspects. Unless their perception towards given paired-images was different, they could mark in item zero and if they found the given aspects were irrelevant with their perception, they could choose the item read "unable to explain".



Qualification	Left Picture							Right Picture						Unable to explain
	5	4	3	2	1	0	1	2	3	4	5			
Affective Measurement														
Cognitive Measurement														
Purchasing desire														
Browsing decision														

Table 1. Rating scales and example images of 3D photographic images

The analysis of collected data was undertaken by Statistical Package for Sciences (SPSS). The data was analyzed by using both descriptive and inferential statistics. Mean was used to calculate the average opinion scores of the respondents having towards the given images as well as aspects on design elements and compositional setting.

4. Results and Discussion

Aforementioned, there were altogether 11 points (affective and cognitive) relatively used with 3D photographs & questionnaires to measure 24 pairs of factors, totaling 48 images. Only 12 images could successfully convey merchandising messages to its target groups as shown in the table 2. From 3D photographic as 12 stimuli factors, it was shown that some factors could convey product messages effectively and amiably attracted the target customers to visit a shop; those factors were accent lighting, which affected people in the sense that they felt excited and interested in a product displayed. In addition, it also conveyed the differentiation and taste of products. These factors finally led to desire to visit a shop and to purchase a product. The obtained distinctive factors (presenter as background, text on the window display, without frame display, with props, and large window size) were taken into account for further development of a window display model.

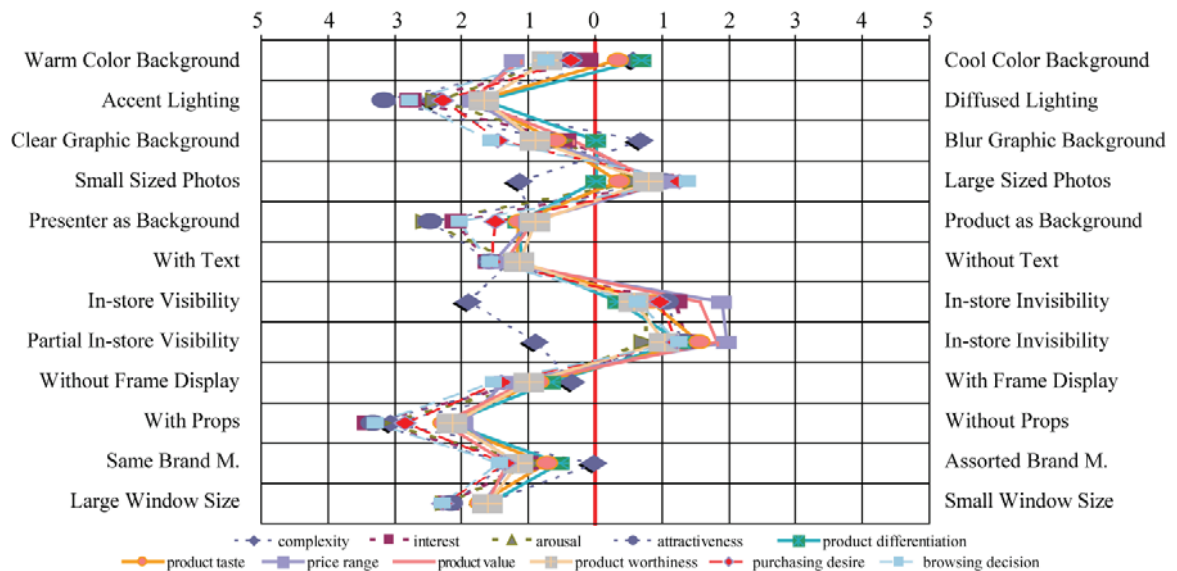


Table 2. Target group's responses to distinctive design elements and compositional settings

5. Conclusions

Window display design could reflect organizational images in this case: a department store, the positioning, value and quality of its products in accordance with affective and cognitive processes of an organism's interaction with stimuli. All the factors obtained from this experimental study would be of potentially beneficial in developing a model for an effective window display design in general and for the corporate strategic merchandising display of a large scale department store in particular. Findings from the research would be used to develop a further design model.

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